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January 2021

INTUITION IO MANAGEMENT

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Recommended Citation

INC, HP, "INTUITION IO MANAGEMENT", Technical Disclosure Commons, (January 24, 2021)
https://www.tdcommons.org/dpubs_series/4006



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Intuition IO Management

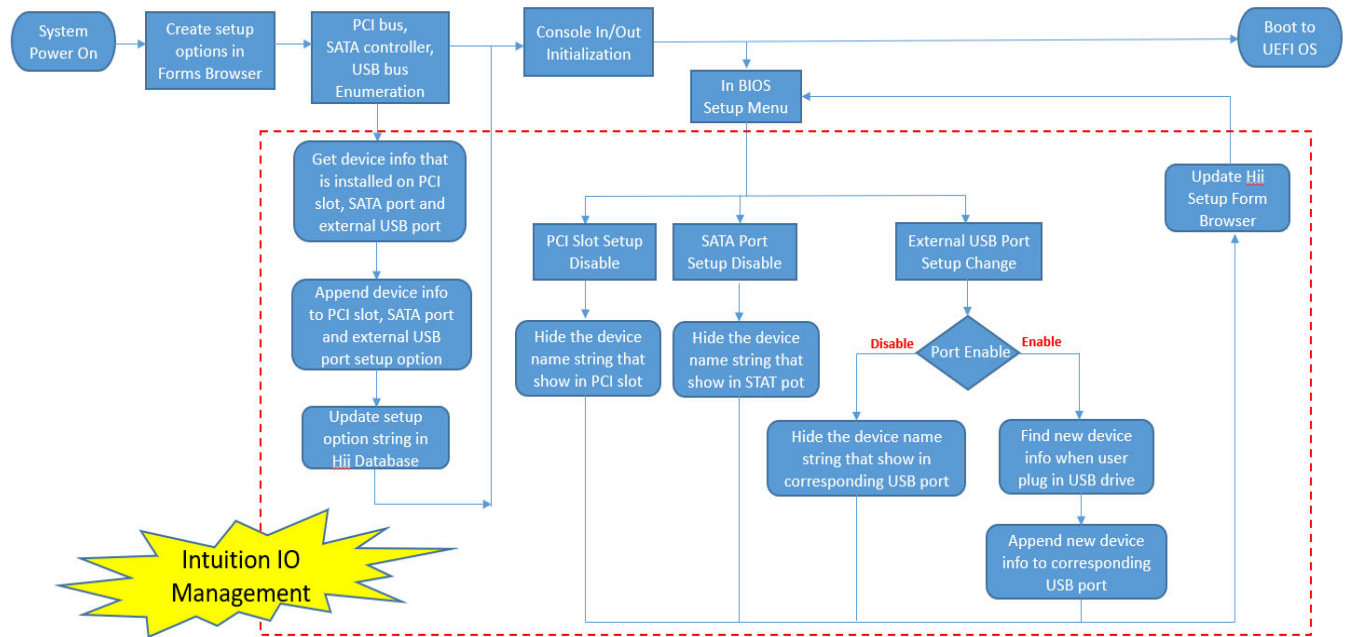
Abstract:

- Desktop tower system support multiple external I/O ports, expansion slots and internal/external storage device. These configurable IO ports/slots can be enabled/disabled via BIOS setup options.
- It is not easy to understand the physical ports mapping if there're many individual USB ports. For expansion slots and SATA devices, although they have printing on motherboard, user needs to open the cabinet to find the printing.
- Once IO port/slot setup option has change, user needs to reboot system and check IO port/slot enable/disable state in OS environment.
- In order to help user to realize the physical IO ports mapping conveniently, BIOS support adding or deleting device name behind corresponding IO port setup option dynamically.
- If the setting of IO port setup option is enabled, BIOS has ability to do PCI/USB bus enumeration in BIOS setup menu to find out device information if hot plug IO device.
- BIOS adds device name behind IO port setup option immediately when user plug in IO device. But if user configure IO port setup option from enable to disable, BIOS also delete device name from IO port setup option immediately.

Design Construction:

- HW: No HW need.
- SW: No SW need
- BIOS: Dynamically adding/deleting IO device name behind corresponding IO port setup options when hot plug IO device in BIOS setup menu.

< Flow Chart >



- **Business Strategy/Advantages**

1. Help user to configure individual external USB port more easily and intuitively.
2. For expansion slots and storage devices, no needed to open cabinet to check their position.
3. No needed to reboot system to confirm if configurable ports is enable/disable correctly.

Disclosed by Chia-Cheng Lin, Ethan Huang, Kyle Chang, Hsin-Jen Lin, HP Inc.